

FIG. 1

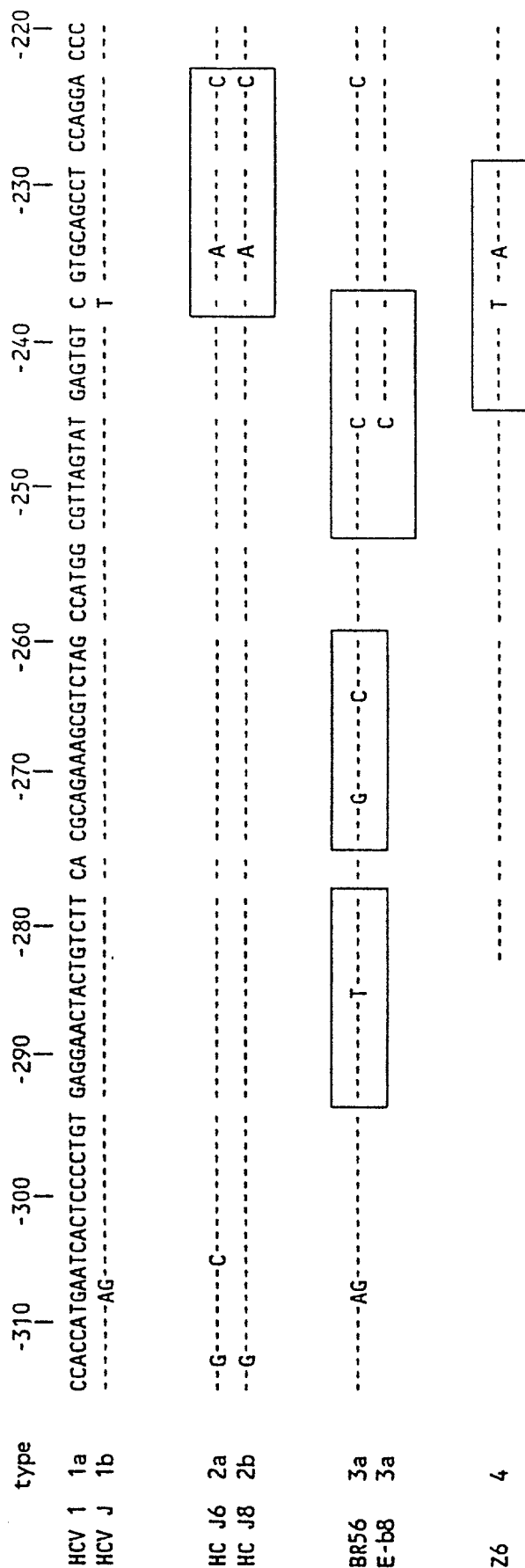


FIG. 2A

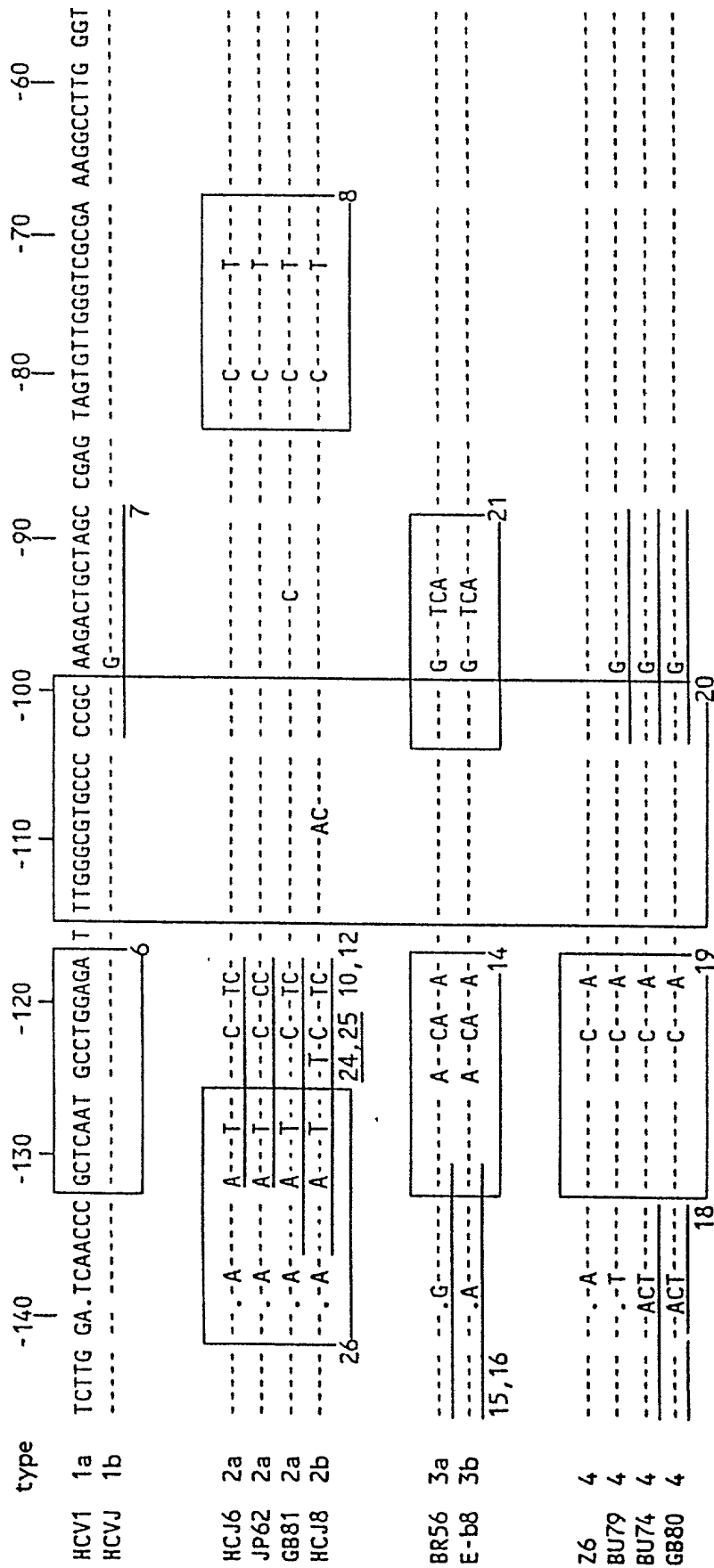


FIG. 2B

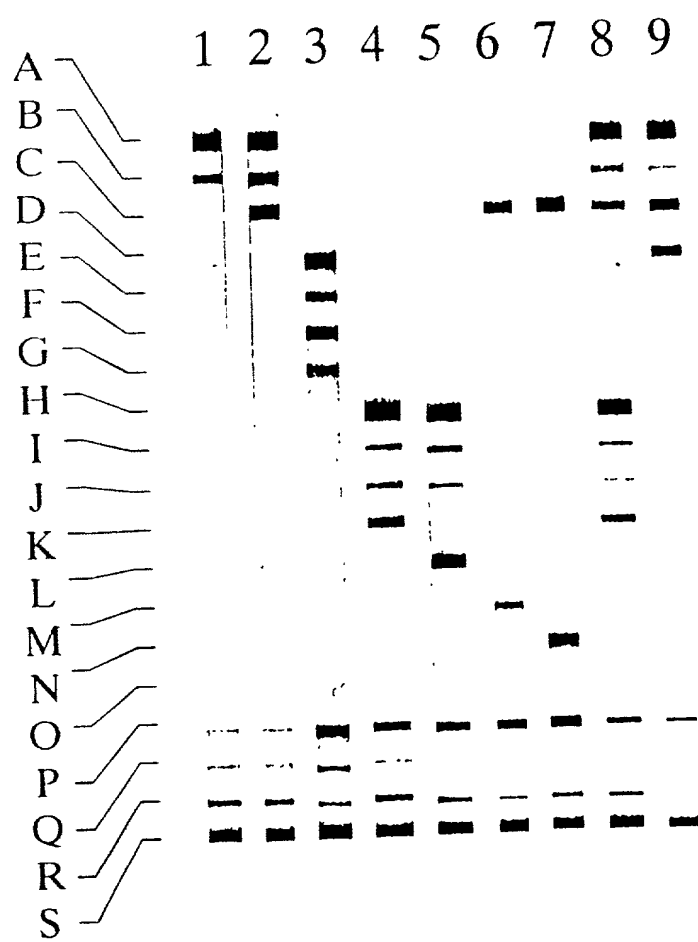


FIG. 3

Iso- late	Type	Accession number ref.									
		-240 ↓	-230 ↓	-220 ↓ ↓	-180 ↓ ↓	-170 ↓	-160 ↓	-150 ↓	-140 ↓		
HCV-1	1a	GAGTGTGTCAGCCTCCAGGACCC*AGTACACCGGAATTGCCAGGACGACCGGTCTTTC..TTGGATC.AA 1									
HCV-J	1b	-----T-----*----- 2									
BE82	1b	-----*----- 2									
BE90	1b	-----T-----T-----T-----T----- 28									
HC-J6	2a	-----A-----C-----*-----G--A--T-----A-- 3									
HC-J8	2b	-----A-----C-----*-----A-G-A-A--T-----A-- 4									
BE91	2b	-----A-----C-----*-----G-A-A--T-----A-- 32									
BE92	2c	-----A-----C-----*-----A--T-----A-- 33									
BR56	3a	-----C-----*-----C-TG-GT-----G-- 5									
BE93	3a	-----C-----*-----C-TG-GT-----G-- 65									
BE94	3a	-----C-----*-----C-TG-GT-----G-- 66									
HCV-TR	3b	-----C-----*-----C-G--T-----A-- 6									
BE98	3c	-----*-----C-----G--TT-----A--T-----A--T----- 54									

SEQ ID NO 61

SEQ ID NO 62

SEQ ID NO 63

SEQ ID NO 64

SEQ ID NO 65

SEQ ID NO 66

SEQ ID NO 80

SEQ ID NO 61
SEQ ID NO 62

SEQ ID NO 63

SEQ ID NO 64

SEQ ID NO 65
SEQ ID NO 66

SEQ ID NO 80

FIG. 4A-1

Iso- late	Type	Accession number ref.							
		-240 ↓	-230 ↓	-220 ↓	-180 ↓	-170 ↓	-160 ↓	-150 ↓	-140 ↓
GB48	4a	-----T-A-----	-----	-----*	-----C-G-T-----	-----	-----	-----	-----A-----
GB116	4a	-----T-A-----	-----	-----*	-----C-G-T-----	-----	-----	-----	-----T-----
GB569	4a	-----T-A-----	-----	-----*	-----C-G-T-----	-----	-----	-----	-----A-----
GB358	4a	-----T-A-----	-----	-----*	-----C-G-T-----	-----	-----	-----	-----A-----
			37					38	
Z1	4b	-----T-A-----	-----	-----C-----*	-----C-G-T-----	-----	-----	-----	-----
CAM600	4c	-----T-A-----	-----	-----*	-----C-GA-T-----	-----	-----	-----	-----
CAM736	4c	-----T-A-----	-----	-----*	-----C-GA-T-----	-----	-----	-----	-----
GB809	4c	-----T-A-----	-----	-----*	-----C-GA-T-----	-----	-----	-----	-----
Z4	4c	-----T-A-----	-----	-----*	-----C-----	-----	-----	42	-----
DK13	4d	-----T-A-----	-----	-----*	-----C-G-T-----	-----	-----	-----	-----A-----
GB549	4e	-----T-----	39	-----*	-----T-----	-----	-----C-G-----	40	-----A-A-----
GB438	4f	-----A-----	-----	-----T-----*	-----T-----	-----	-----C-G-T-----	-----	-----ATC-----
GB724	4g	-----A-----	51	-----*	-----T-----	-----	-----C-----	52	-----T-----
BE97	4g	-----T-A-----	-----	-----*	-----	-----	-----C-----	53	-----T-----
GB487	4h	-----T-A-----	-----	-----*	-----	-----	-----C-----	49	-----T-----

SEQ ID NO 67
SEQ ID NO 68
SEQ ID NO 69
SEQ ID NO 70

SEQ ID NO 72
SEQ ID NO 73
SEQ ID NO 74

SEQ ID NO 71

SEQ ID NO 81

SEQ ID NO 76

SEQ ID NO 77

SEQ ID NO 75

FIG. 4A-2

Iso- late	Type	Accession number ref.									
		-240	-230	-220	-180	-170	-160	-150	-140		
SA1	5a	↓	↓	↓	↓	↓	↓	↓	↓		
BE95	5a	↓	↓	↓	↓	↓	↓	↓	↓		
BE96	5a	↓	↓	↓	↓	↓	↓	↓	↓		
		44	44	44	44	44	44	44	44		
		45	45	45	45	45	45	45	45		
		47	47	47	47	47	47	47	47		
HK1	6a	↓	↓	↓	↓	↓	↓	↓	↓		
HK2	6?	↓	↓	↓	↓	↓	↓	↓	↓		

SEQ ID NO 78

SEQ ID NO 79

FIG. 4A-3

Isolate	Type	-130 ↓	-120 ↓	-110 ↓	-100 ↓	-90 ↓	-80 ↓	-70 ↓	Accession number reference
HCV-1	1a	CCCGCTCAATGCCTGGAGATTGGGCGTGCCCGCCGCAAGACTGCTAGCCGAGTAGTGTGGTCCGA 31							1
HCV-J BE82 BE90	1b 1b 1b	-----G-----29 -----G-----30 -----G-----31							2
HC-J6	2a	---A---T---C---TC---C---T---							3
HC-J8 BE91	2b 2b	---A---T---T---C---TC---AC---T---T---T---							4
BE92	2c	---A---T---TC---34							5
BR56 BE93 BE94	3a 3a 3a	-----A---CA---A---G---TCA--- -----A---CA---C---G---TCA--- -----A---CA---C---TCA---36							6
HCV-TR	3b	-----C---A---G---TCA---							6

FIG. 4B-1

Isolate	Type	-130 ↓	-120 ↓	-110 ↓	-100 ↓	-90 ↓	-80 ↓	-70 ↓	Accession number reference
GB48	4a	---	C--A	---	---	---	---	---	
GB116	4a	---	C--A	---	---	---	---	---	
GB569	4a	---	C--A	---	---	---	---	---	
GB358	4a	---	C--A	---	---	---	---	---	
GB549	4e	---	C--CA	41	---	---	---	---	
CAM600	4c	---	TC--A	---	---	---	---	---	
CAM736	4c	---	TC--A	---	C	---	---	---	
GB809	4c	---	TC--A	43	---	---	---	---	
GB487	4h	---	---	A	50	---	---	---	
GB724	4g	---	---	A	---	---	---	---	7
BE97	4g	---	---	A	---	---	---	---	
SA1	5a	---	C	---	G	---	---	---	
BE96	5a	---	C	---	G	---	---	---	
BE95	5a	---	C	---	G	---	---	---	8
		---	C	46	---	---	---	---	
HK1	6a	---	---	---	---	---	---	---	
BE98	3c	---	C--A	---	G	---	---	---	
GB438	4f	---	C--A	---	G	---	---	---	

FIG. 4B-2

FIG. 5A

100

SEQ ID NO

	101	
HCV-1	SAGVQEDAASLRA	
HC-J1	-----	
HCV-H	-----	
HCV-J	---T---A---	
HCV-JK1	---T-----V	
HCV-CHINA	---T-----V	
HCV-T	---T-----V	
HC-J4.91	---T---A---	
HCV-TA	---T-----V	
HCV-JT	---T-----V	
HCV-BK	---T-----V	82
BE90	---T-----V	
HC-J6	-Q-TE--ERN---	
HC-J8	-Q-NE--ERN---	83
BE91	-Q-NE--ERN---	84
BE92	-Q-TE--ERN---	
T1	-D--D--R-A---	
T7	-D--D--RTA---	
BE93	-D--D--R-A---	85
T9	-C--E--R-A---	
T10	-C--E--R-A---	
GB48	-D--E--KRP-G-	86
GB116	-D--E--KRA-G-	87
GB215	-D--E--KRA-GV	88
GB358	-D--E--KRA-G-	89
GB549	-G--E--RA---	90
GB809	-G--E--KRA-G-	91
BE95	-Q-TH--E-----	92
CHR18	-Q-TH--K-----	

FIG. 5B

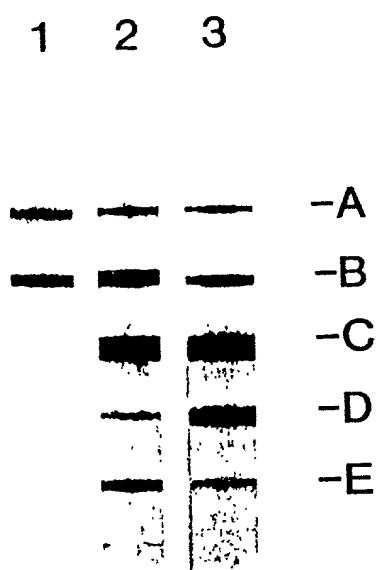


FIG. 6

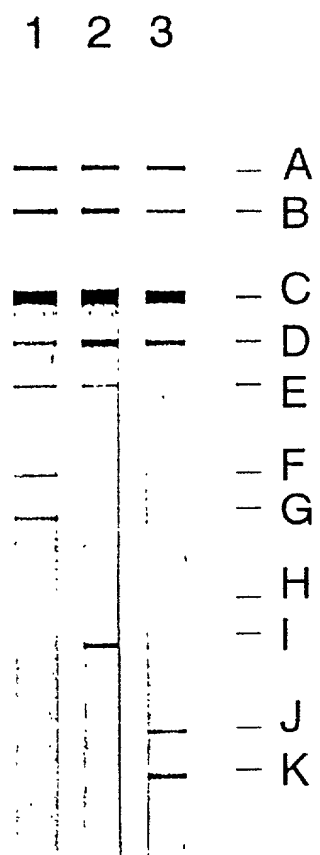


FIG. 7

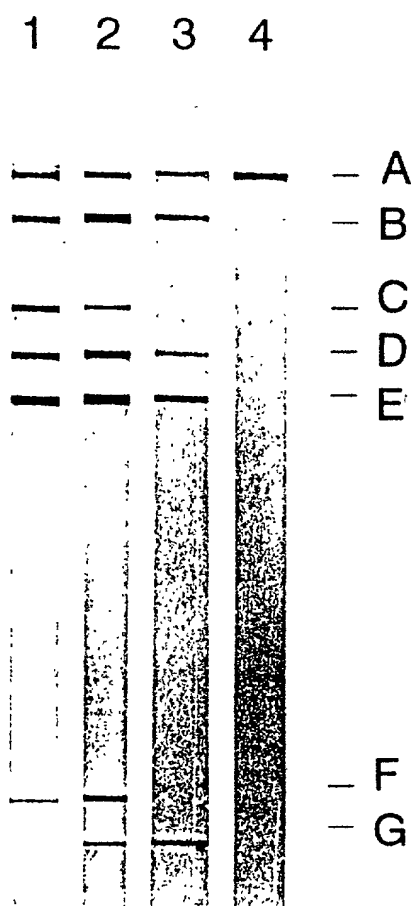


FIG. 8

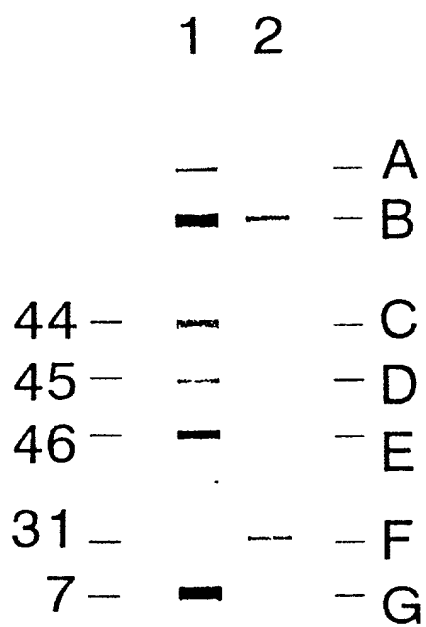


FIG. 9

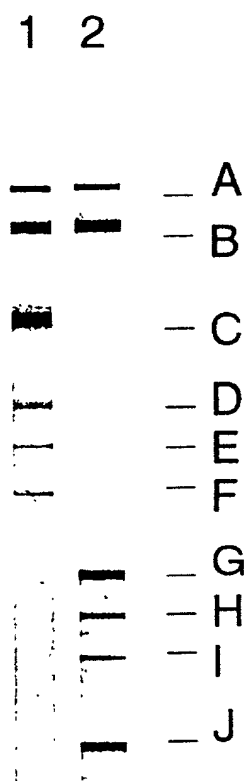


FIG. 10